THE GENESEE FARMER.

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THE GENESEE FARMER.

SATURDAY, SEPT. 27, 1834.

On the Manners of the Bat.

When undomesticated animals advance our interests or increase our comforts by preying on the plunderers of our property, or on insects that incommode our persons,—such ought to be made known to us that we may treat them with the kindness due to benefactors. In our last volume, we called the attention of our readers several times to the usefulness of the BAT. We were induced to do this, because we knew it to be an animal that had been barbarously persecuted; and we thought its value as an auxiliary was too little understood. Perhaps it would not be *in the direct line* for Naturalists to speak of them with either praise or blame; but we have thought that one good word might have been *obliquely* introduced in behalf of creatures all of whose propensities operate to our benefit.

The large eared Bat of England is extremely dextrous in clearing flies of their wings which it always refuses to eat. It is probably in reference to this habit the following complaint is made in the "Journal of a Naturalist": "But chiefly I conjecture the larger bats are the creatures that have caused me to experience at times both envy and regret, when I have observed scattered in some woodland path, amidst the fragments of their nightly banquit, the relics of such beautiful insects as the Emperor of the woods, the Verdigris moth, and twenty other rare insects." And we have yet to learn how many destructive moths that elude our observations in the day, are devoured and reduced in number by the activity of our American Bats. The caterpillars that infest our orchards when arrived at the perfect state, and become nocturnal moths, are probably among the number.

The Bat is capable of being tamed, and taught to feed from a person's hand; and according to Dr. GODMAN, it has been known to show the most devoted affection for its young; "and forego all efforts at self preservation in order to be near her captive progeny. In June 1823, the son of Mr. Gillespie, keeper of the city square, [Philadelphia,] caught a young red Bat (*Vespertilio Nov-Eboracensis*) which he took home with him. Three hours afterwards in the evening, as he was conveying it to the Museum in his hand, while passing near the place where it was caught, the mother made her appearance, followed the boy for two squares, flying around him, and finally alighted on his breast, such was her anxiety to save her offspring. Both were brought to the Museum, the young one firmly adhering to its mother's teat. This faithful creature lived two days in the Museum, and then died of injuries received from her captor."

What follows we consider as an act of wanton cruelty, because the experiment might have been tried quite as effectually without subjecting these creatures to suffer the acutest pain, and then to perish: "In 1793 SPALLANZANI put out the eyes of a Bat, and observed that it appeared to fly with as much ease as before, and without striking against objects in its way, following the curve of a ceiling, and avoiding with accuracy, every thing against which it was expected to strike. Not only were blinded Bats capable of avoiding such objects as posts of a building, but they shunned with equal address, the most delicate obstacles, even silken threads, stretched in such a manner as to leave just space enough for them to pass with their wings expanded. When these threads were placed closer together, the Bats contracted their wings, in order to pass between them without touching. They also passed with the same security between branches of trees placed to intercept them; and suspended themselves by the wall with as much ease as if they could see distinctly."

The celebrated CUVIER referred this curious circumstance to "the exquisite sense of touch resident in the membranous skin forming the wings, ears, &c. as had been previously hinted at by Odier. During the flight of the blinded Bat, whenever it approaches any objects, the air set in motion by its wings, reacts against their surface with a greater or less degree of force; and being in this manner warned of the proximity of the object it wards injury by changing its course."

On half-sweet and half-sour APPLES.

Our correspondent W. at page 274 appears to have misapprehended in some measure, the design and intention of our remarks on apples half-sweet and half-sour. The drift of our article was directed against the *manufacture* of such apples—against the popular notion that a skillful grafter can produce such apples from any two varieties one of which is sweet and the other sour. We remain incredulous on this subject. We shall be ready to believe it however, should the necessary proofs be exhibited; but an apple,—one half resembling the Rhode Island Greening and the other half the Tallman's Sweeting—cannot be received as evidence of such *manufacture*, without *other* proof; because it may be a *natural* variety, which W. is not disposed to deny,—for among the immense number of varieties which originate, many anomalous kinds may be expected to occur. The proof that we should require to show that such apples may be produced, would be to have them grafted together from some sorts previously designated,—such as the *diminutive* Hughes's Crab to the *gigantic* Gloria Mundi; the *early* Juneating to the *late* American Pippin; and the *red* Spitzenburgh to the *light russet* Pomme Gris. Examples of all these we think would fairly test the principle. Let it not be supposed that we mean to be unreasonable in our requisitions: In proportion as a statement deviates from the common order of things, the evidence should be the *stronger* to insure our belief; and when this shall be satisfactory, we hope to be prepared to acknowledge the favor.

We have *since* found the following account of the "Sweet and Sour" apple, and to show W. that our recollections were distinct, we copy it from *Coxe's* View of the cultivation of Fruit Trees, page 172:

"This apple derives its name from the peculiar property of possessing *these different qualities* in the same fruit. The surface is often *uneven*, the *prominences* having *one taste*, and the *hollows another*. It is not otherwise deserving of much notice." He has made no suggestion of its being an *artificial* variety. V.

For the Genesee Farmer.

The Barberry not Injurious to WHEAT.

As I deem it of some importance that this subject should be well understood, I offer the following account which appeared in the (British) Farmer's Magazine. "Falls" is a provincialism of which *Webster* only says, "In Great Britain, a term applied to several measures, linear, *superficial*, and solid." "Boll" is "a measure of six bushels."

"It is the opinion of many, that the Barberry has certain malignant effects upon the growing wheat, and other kinds of grain, insomuch that if it happens to grow within three or four hundred yards of these, they will be rendered so unfruitful, that in place of full ears, little better than husks will be found. Having heard that this idea determined a farmer in the vicinity of Cupar in Fife to cut out all the Barberries growing upon his premises; and that it was likely to spread the destruction of so useful a plant in filling up the gaps in thorn hedges, and even in making a tolerable fence where thorns will hardly thrive,—an experienced farmer determined to make trial; and having a hedge of Barberries, he sowed in autumn 1799, two pecks of white wheat, in drills about twelve inches apart, which occupied about forty-four *falls*, within seventy-five yards of his Barberries. It appeared by no means hurt in any stage of its growth; rose to five feet and a half high, and produced four bolls and a half of *as fine grain as could be shown*. In the course of the winter 1799 he was apprehensive that seventy-five yards might be too far off; and accordingly in the spring of 1800, he sowed a small quantity of wheat just beside the growing hedge, which to his no small satisfaction produced *as perfect grain as he ever saw*. In autumn 1800, he sowed a peck and a half upon about thirty-six *falls* of ground, within two hundred and fifty yards of his Barberry hedge, which rose to about five feet high, and produced three bolls and a half of *excellent grain*. From all which he concluded, that if Barberry is malignant to growing corns, it is not in every district of the country." D. T.

Greatfield, 9 mo. 15, 1834.

It is stated in a New York paper that pure Anthracite coal has been discovered on the Hudson River, opposite the village of Poughkeepsie.

For the Genesee Farmer.

On Peaches and Apples.

I have lately taken up a volume, printed in the year 1804, called "An Epitome of Mr. Forsyths' Treatise on Fruit Trees." By cutting the original work down to about 120 meagre pages, the epitomizer found room for 60 pages more of his own observations! which shelter under the title-page of a NAME at that time famous for the "COMPOSITION" and a PARLIAMENTARY REWARD. There is however, such a quaintness—such a raciness of thought in the "NOTES," that I can easily excuse all his aberrations. From various expressions I infer that he was a native of England, having resided not very distant from Baltimore; and perhaps this circumstance will add something to the value of his remarks, from his being a looker-on in new scenes. For the present I shall only transcribe what he says on Peaches and Apples.

"PEACHES are in some variety, and ripen to great perfection in the Middle and Southern States; as with but a little attention they would in the more Northern States of America. It is a fruit that is so natural to the country of these States, that they are applied as food to hogs, also in making brandy, and for culinary purposes. *They are in succession, one sort coming after another, from July to November.* In some of the States, kilns are created for drying and curing apples, pears, peaches, and other fruits in great quantities; where pies are made into mountains of crust! thick, essential, and cheap; and given to hirelings, as an agreeable food for all laboring people in the country, and which needs but little sugar. The dried fruit is packed in casks for family use, and is sometimes exported as merchandize. They are generally divided into clear-stone and cling-stone peaches. The cling-stone sorts are in France called *pavies.* It seems that in France and England the clear-stone sort is preferred at their tables.

"But of all Peaches, perhaps of all fruits, there is none equal in flavor to the American HEATH PEACH, a cling-stone. It is large, weighing near a pound in common: with but a moderate attention the editor believes they would very generally weigh a full pound. It is backward in ripening northward of the Susquehanna; and is one of the last sorts that ripen; *many weigh a full pound.* Peachley's [Speechly's] form of *a Vinery would perfect the ripening*, and secure the fruit from thieves."

"Every American farm has some sort of an APPLE orchard. The fruit is of various sorts of apples, and formerly gave much cider; and store apples abounded. Now the trees and entire orchard become daily more mean, and there is a great scarcity of cider; but few keeping apples, and those knotty, dry, and insipid. There is not the attention to orchards that has been. West India spirit and French brandy abound in the shops; and we wear out the strength of our lands in scuffling for corn, of all sorts, to be sold to the shop keepers, who furnish us very readily with exotic spirit and brandy. The orchard is no longer manured: instead of it various *corns*—oats, barley, rye, and even Indian corn and wheat are sown and reaped in the orchard, on ground not half dressed or cultivated. Moreover the orchards are now left open to powerful storms, to which they are exposed from the general clearing of the country, and particularly from clearing away the neighboring woods that had sheltered the orchard. Further, pruning and training fruit trees are less understood and less attempted than formerly. *Mighty rum and mighty brandy divert better attentions.*"

Autumnal Fowers.

(*In a letter of the 15th instant.*)

Annual flowers are much more cheaply procured than any other exotic ornamental plants; and many of them are very beautiful. Small papers of one hundred kinds may be had for four or five dollars, or a single paper for six cents. I will name a few that I consider the most interesting; but we must remember that we want flowers early in Spring as well as in Autumn.

Ageratum mexicanum greatly resembles *Eupatorium culestinæm.* It has light blue flowers, and soon becomes naturalized in the garden.

The three colored Amaranthus (*A. tricolor*) is both singular and pretty, the colored leaves being very conspicuous objects. It requires a rich soil well cultivated.

Anagallis (*indica?*) called Pimpernell, spreads on the ground, and for a long time produces fine blue flowers, half an inch in diameter with a red eye. It is much more ornamental than *A. arvensis.* Some such prostrate plants are desirable, as they give variety to the border.

The China Aster (*A. sinensis*) is very brilliant; and few things are finer than a bed of these flowers where many varieties are exhibited. THORBURN enumerates more than a dozen sorts, among which are the *striped*, and the *quilled.*

The Strawberry Spinach (*Blitum capitatum*) is only ornamental on account of its fruit; but it readily becomes a weed, and then like other intruders it is soon treated with disrespect.

Browallia elata is delicate and has run into two varieties; but perhaps it has become most interesting from its connection with the History of *Linnæus.* "The only instance of transient ill will which can be cited, is against Browall [formerly one of his pupils.] This person in his youth was very humble in relation to Linnæus; and the latter dedicated to him a genus which contained only one species *Browallia demissa* (low.) Afterwards made Bishop of Abo, Brow all assumed to be a great lord, and Linnæus found a second species which he named *Browallia* [*elata*] (lofty.) Browall having become furious, wrote against Linnæus pamphlets in no very measured terms; a third species was found, *a little different from the genus*, and Linnæus named it *Browallia alienata* (alienated.) By a singular chance, no other species of the genus has ever been found, so that the names of Browallia still preserve the anecdote entire."*

The Scarlet Cacalia (*C. coccinea*) is beautiful, and should always be provided with a place in the border. It is from the East Indies; but like many other tropical plants, it is well satisfied with our summers, and matures its seed in good season.

Of *Cassia chamæcrista*, Professor Eaton says, "a most elegant plant," in which opinion I fully concur. I have seen it at the South where it is a native; and have long given it a part of my border.

The long rayed American Centaurea (*C. americana,*) or as it has since been called *Plectocephalus americanus*, makes a fine display. Such plants as fail to flower, abide our winters without damage.

*Notice of Fee's Life of Linnæus. Translated for Silliman's Journal by Dr. John H. Griscom of New-York.

Hydraulic Cement.

Mr. J. Parker, the inventor of the Hydraulic Cement, an article designed for the construction of water cisterns, cellar walls, &c., has sent to this office a specimen of his cement, together with an account of its peculiar utility. The specimen, which Mr. P. informs us was in soft mortar on the 4th of July, appears like real stone, strong and solid, with the color of common lime mortar. Cisterns are made from this cement without stone, brick, or wood, bedded in the earth, and when finished they are firm and durable, and well calculated to keep water in a pure state. Mr. Parker, who resides at Lodi, desires us to say that he purposes to send on a builder to this city in a few days.

For the Genesee Farmer.

Ripe Tomato Pickles.

Take Tomatoes two thirds ripe, (when they begin to turn a little red,) prick them with a fork, put them in a strong brine, and let them remain eight days: then put them in weak vinegar to remain 24 hours; remove them from this, put them into stone jars; and to a peck of Tomatoes add a bottle of mustard, an ounce of cloves, and an ounce of black pepper ground, a dozen large onions sliced, laying alternately a layer of Tomatoes, and onions and spices. Then pour on very strong vinegar cold, and they will be found to be delicious. The brine should be prepared by boiling and putting in as much salt as will dissolve, then suffered to cool. For any kind of pickles it is best when prepared in this way. Z.

TO MAKE TOMATO KETCHUP.

Take a quantity of ripe tomatoes (say two gallons) cut them in small pieces, put them in a small earthen pot or jar; about half a pound of salt, a table spoonful of allspice, the same quantity of pepper, a quarter of an ounce of mace; tie the jar up close, put it in an oven after the bread is taken out, and let it stand all night, and repeat it three times when you bake bread; then strain it off and bottle it, and it is much better than mushroom ketchup for culinary purposes.

TOMATO SAUCE.

Peel and slice twelve tomatoes, add three pounded crackers, pepper and salt them to your taste, stew fifteen minutes.

The Albany Cattle Fair,

Will be held on *Wednesday* and *Thursday, the 8th and 9th days of October next*, for the exhibition and sale of Neat Cattle, Horses, Sheep and Swine; of Farm Implements, Seeds, Domestic Goods, &c. The cattle exhibition will be held at Washington Square, in the west part of the city, where pens will be provided, and an auctioneer attend in the afternoon, to sell such stock as the owners may wish to sell at auction. The implements and domestic products will be exhibited at the City Hall, and an auction will be held there on Thursday afternoon, for the sale

of such articles as may be offered. Each place will be under the supervision of managers, and a clerk will attend at each to register all animals and articles presented.

In order that a printed list of animals, &c. may be prepared for use at the fair, gentlemen are requested to forward a list of such as they intend to present, as early as the 7th, in order that the whole may be arranged, and the pens for their reception indicated in the printed list. Communications on this subject may be addressed, postpaid, to James D. Wasson, who will act as secretary to the Cattle Fair. The regulations for the government of the Fair, will be printed with the list of animals to be exhibited.

Stephen Van Rensselaer, jr., Levi Cornell, James D. Wasson, James Gibbons, Matthew Bullock, and Patrick Cassidy, will officiate as Managers at Washington Square; and James G. Mather, Seth Hastings, Douw B. Slingerland, Aaron Thorp, Caleb N. Bement, and Hiram Perry, will officiate as Managers at the City Hall.

Editors of newspapers are requested to give insertion to this notice, as matter of interest to their readers and to the public generally.

JOHN TOWNSEND, Chairman.

From the New-England Farmer.

Farmer's Work.

MANURE IN PASTURES, &C.

"Every fortnight," says an English Agriculturist, "I send my boy with a shovel and wheelbarrow to take up the dung in the pastures, which is put on a heap and covered up with earth or ashes; as I think that nothing encourages and promotes the rank and strong tufts of grass, which take up a great part of most grass land, and which the cattle will not touch, more than the too common practice of suffering the dung to remain on the ground. By a strict adherence to the above method of taking up the dung, my pastures become an entire level of grass. In a few weeks the grass is grown on the places where the dung was laid, and not a vestige of the dung is to be seen. But in those pastures where the above is not practiced I usually find a great part of them incommoded with numerous tufts of rank grass, and a great quantity of dung, especially in autumn when the pastures begin to fail, and this in fact is to diminish or take nearly an eighth of such pastures, not to mention the very great difference of the dung both in quantity and quality."*

In Great Britain, land is dear and labor cheap, and as circumstances alter cases, it may with us be a question whether the course above recommended is advisable. But farmers will determine for themselves, whether they will incur the labor and expense attached to preserving and accumulating manure. In pastures which are rich and well stocked with neat cattle, it would, perhaps, be expedient to save manure in this way. It might be gathered in a cart or wheel-barrow, thrown into heaps in the pasture, or drawn to the farm-yard, as circumstances might direct, and covered with earth.

There can be no doubt that in all cases where cows, or other stock are confined every night in yards, that it is good husbandry to throw the manure they make into heaps every morning, or at least every two or three days, and cover it with common earth, ashes, marsh mud, loam or other suitable matter to preserve the deposit from being dried up, washed away, or given to the elements without that kind of equivalent, which lawyers call a *quid pro quo*.

PLOUGHING.

It is best that most tillage lands should be ploughed in autumn. Fall ploughing saves time and labor in the spring, a season in the year when cattle are commonly weak, and the hurry of business presses heavily on the farm. But a soil which is light and sandy should not be disturbed by fall ploughing, but left to settle down and consolidate through the winter.

GATHERING AND PRESERVING POTATOES.

With regard to the time in which potatoes should be gathered, we have found that practical farmers entertain different opinions. It is, however, acknowledged by all, that when intended for consumption, and not for seed, they should not be gathered till they are ripe. The ripeness of the potatoe may be perceived by the appearance of the tops, which will begin to decay as soon as the roots have arrived at maturity. After that period, we are told by some cultivators, it is important that the potatoes should be gathered and housed as soon as convenient, or immediately after the tops are decayed either by ripeness or frost. Others say that potatoes will keep best in their native beds till the ground is frozen. But at any rate, it is best not to defer digging till very late, lest cold weather should shut them in the ground till spring, and perhaps destroy them.

The old fashioned mode of harvesting potatoes was, to dry them in the sun as you would grass for hay. Rees' Cyclopedia directs, "as soon as potatoes are gathered, they should be *allowed to remain some days to dry before they are stored.*" This we believe to be wrong, especially in our climate; for an exposure of two or three days to a cloudless sun in September, or October, would cause potatoes to turn green, taste strong and bitter, and become in some degree poisonous. It is now said by practical farmers, that the less potatoes are exposed to sun and air after being taken from the ground the better, and that it is advisable to permit some part of the soil in which they have grown to adhere to and mix with them, when housed. It may be best, however, not to dig and deposit potatoes immediately after a heavy rain, but permit them to remain a few days in the hills, to get rid of their superfluous moisture, which will in due time be expelled by the vital energies of the roots.

Mr. Buel of Albany, observes, 'it were better that the sun never should shine upon potatoes; that they should be housed with all the dirt that adheres to them, that it is beneficial to add more dirt in the bin or cask, to exclude external air as much as possible, and that their surface should be kept moist, and the atmosphere which surrounds them as little above the freezing point as possible.'

Monthly Strawberries.

Mr. John Cowles of this village, has a small bed of monthly strawberry vines, from which he now picks daily ripe berries. Two or three roots were presented to him last autumn; he put them in a box, and kept them in his house during the winter, and in the spring transferred them to his garden. They have borne every month since he has had them, except February; and from two or three roots have spread to a bed of two feet square. The berries are very large, and the flavor delicious. We saw the bed last week: the blossoms were very full upon it, young berries set in great numbers, and ripe ones on the stems. Monthly Strawberries may be quite common to our readers, but these are the first we have ever seen. A notice was recently published in the New York Commercial Advertiser, stating that a gentleman in New-Haven had a large bed of them, and was able to send to market every morning quite a quantity. If they are not common, they are worthy the attention of horticulturists, for the vine appears to bear with more exuberance than the common vine. To have berries every month in the year—or eleven months of the twelve—of the finest flavor which the palate can receive, would be to us very desirable.—*Poughkeepsie Telegraph.*

Vetches &c. Ploughed in.

UNDER this article may be included all sorts of green manure. Amongst the most active parts employed as manure, I have found the wild species of the genus Sinapis, ploughed in fresh in the bottom of turnop drills, at the rate of twenty tons per acre. The produce brought by auction £12, while the rest of the field manured with twenty tons of farm-yard dung, brought only from £9 to £10 per acre. Other weeds, such as nettles, thistles, ragwort, &c. produce crops superior to farmyard dung. Potato stems, fresh ploughed in on clover lay for wheat, I have found to produce crops exceeding by two bolls per acre in quantity, with more proportionate weight of straw, the other parts of the same field manured with farm-yard dung, but otherwise under the same circumstances. The stems from three acres of good potatoes, will manure an acre for wheat to much better purpose than 15 tons of farm-yard dung, the usual quantity allowed in that part of the rotation; clover after wheat being the crop which generally precedes fallow. Under the head of "green manure," I may mention an experiment I this year made with pea-straw converted into dung without the aid of cattle. Having something of that sort on hand about the middle of last May, and being in want of some loads of manure to finish a potato field, I had the peas thrashed at the mill, and the straw and chaff carried to the side of the potato field, and made up like a large hot-bed, giving each layer of straw an ample watering. Fermentation soon commenced: and by the fifth day the mass was so far decomposed as to be easily filled into the carts. The effluvium in filling was almost intolerable. It was in this state laid in the bottom of the drills; the sets of potatoes were planted above, and the earth ploughed over the whole. Notwithstanding the dry nature of the ground, and the dry state of the weather in the summer months, the part of the field manured with decomposed pea-straw yielded a better return than where farm-yard dung was applied.—*Loudon.*

Temperance, employment, and a cheerful spirit, the great preservers of health.

*Hunter's Geographical Essays.

From the Farmer and Mechanic.

Cultivation of the Vine, Catalpa,

LOCUST TREES, &C.

Letter from General William H. Harrison, President of the Agricultural Society of Hamilton county, (Ohio,) to J. Dille, Esq.

North-Bend, 28th July, 1834.

DEAR SIR—Your letter of the 15th inst. reached me a few days ago, and I proceed to give you all the information in my power, on the subject of your inquiries.

I had, as you have heard, a vineyard of about one and a half acres, nearly equally divided between the grape which is here called the Vevay grape, and the Madeira variety. The location was a bad one, being on the bank of the Ohio. This situation exposed it to too much moisture, particularly as the soil was a stiff one. It flourished very well, however, for a few years; but the grapes (after the fourth year, I think from its bearing well) always grew mouldy at first, and towards the latter part of the season withered. The Vevay grape succeeded much better than the Madeira. I made from the former several barrels of wine, one of which only was good, but that, being bottled for six or eight months, was excellent. In color it resembled the claret. In making it, I have put in four pounds of Muscovado sugar and half a gallon of *high wines* to the barrel. I have attributed the failure of my vineyard to the character of the soil, and its situation at the foot of a hill. I am, however, not certain that the failure, in part, may not justly be assigned to the manner of cultivation. It was planted and cultivated by a Swiss from the *Pays de Vaud,* and he pursued the course of management pursued in the country he came from; yearly heading down the vine to the hight of four or five feet from the ground. The mode of pruning will not answer in this country. I speak with confidence on this point; because it has failed equally on my side of the river, where the soil is stiff, and on the opposite side, where it is light; and on both sides the opposite practice of suffering the vine to extend itself a considerable distance has succeeded. I have now vines in my garden (the site of which is not like that of the vineyard) filled with grapes for thirty or forty feet; and this is also the case on the opposite shore in Kentucky. In relation to the best soil for a vineyard, I answer, that I believe the grape may be made to flourish extremely well upon almost any of our Ohio soils. There is no doubt, however, that some of the varieties will answer for some soils better than others. And there is no opinion better established by facts, than that a very slight change in the soil and situation makes a material difference in the quality of the vine. This is said to be the case with Champaigne wine; and it is asserted that the difference in some of this wine is very considerable in the same vicinity, when the aspects which the vineyards present, and the appearance of the soil, are precisely similar. I cannot help thinking, however, for reasons which I shall presently give, that upon examination it would be found, that although the surface of the ground upon those spots producing different qualities of wine were alike, the *sub-stratum* would be found to be very different. I believe, indeed, that the nature of the sub-stratum is of more importance in the cultivation of the vine, than that of the surface. If the latter is not of the proper quality, the defect may be remedied by culture, and the proper application of manures and other substances tending to correct its defects; but if the understratum should be tenacious, or communicates to the water which it contains (and of which the vines consume so large a quantity) any bad quality, the wine cannot be good. Indeed, no delicate fruit of any kind can be produced in such situations. It appears the vine delights in pure water, and where the sub-strata are of a loose texture, it will protrude its roots to an immense depth in search of it. The vine planted in a soil of that kind will, in a great measure, be independent of drouth or extreme wet. In a drouth, it will obtain its supplies by penetrating downward until it finds a sufficiency; and on the other, the water will pass off freely, and not linger about the roots, which are prone to take it up in too large quantities. But, however important it may be to have a loose soil for a vineyard, a person who has no other than that of a different description, can overcome the obstacle at no great expense. The process to which I allude was adopted with success upon the farm on which I was born. It was the variety which in this country is called the Madeira grape, and of which the white wine of Vevay is made, that was subjected to the experiment. This farm, lying twenty-five miles below Richmond, upon the James river, possesses a most tenacious stiff yellow clay soil. Many years before I was born, my father had endeavored to cultivate the vine extensively for the purpose of making wine. Not succeeding on a large scale, no doubt from the unfitness of the soil, he limited his efforts to a large square in the garden In this, and at the proper distance for ploughing the vines, deep pits were dug, (I do not know how deep or wide,) and partially filled up with gravel, sand and brick bats. A sufficiency of proper soil was placed upon this foundation, and the vines planted in the center of each. I do not know the exact date of the experiment: it was before I was born, at least before I can remember, and I am now upwards of sixty. But I know the grapes were always excellent, when I was in the habit of eating them; and my nephew, who owns the estate upon which they grow, informed me, but last fall, that they were still very fine. The experiment, which I have said was made by my father, of a vineyard on a large scale, was not made on the same kind of soil (upper soil) with that of his garden above described, but at the distance of two miles, upon a creek bottom, where sand predominated on the surface. He was, no doubt, aware that light soils were best for grapes. As I have before stated, the experiment failed. I do not know that ever I heard the reason assigned; but I have no doubt that it would be found, upon examination, that although the surface was sandy, the *substratum* was of the same tenacious clay with the intervening lands between the creek and the main river. I have given you the opinion, that the better quality of grapes requires a loose under soil: 1st. from my failure in a soil of a different description. 2d. from the success which attended the experiment of an artificial *substratum.*

I have been thus particular because I think it necessary to be so in relation to any agricultural process.

I cannot answer your second question, not having attempted the cultivation of any grapes but those above mentioned. I believe, however, that the variety called the Catawba is generally preferred. But although it may have succeeded well elsewhere, it may be quite otherwise in your situation. I recommend that you commence with planting the Catawba, Isabella, and the blue Vevay grape. You can certainly obtain the two former by sending to New York or Philadelphia, or from Mr. Adlum's vineyard near Georgetown, D. C.

4th. There cannot be much difference in the cultivation of the different variety of the grape with the exception of pruning. All the Europeans who profess to understand the cultivation of the grape head down the vines as low as only to require the support of a single stake of the length of five or six feet above the ground. The experiments which have been made, of suffering the vine to run a considerable distance on trellises or trees, have proved that the latter is the better mode, at least as regards the Vevay and Madeira grapes. This mode is also practiced in some parts of Italy. Col. Vigo, of Vincennes, informs me that in Peidmont, and in the vicinity of Genoa, to save the expense of artificial supports, the vines were trained on mulberry trees, of which large numbers were raised for feeding silkworms. Thus obtaining from the same tree materials for wine and silk.

After the vines are planted, with the exception of the annual spring pruning and tying them to the frames or stakes, an acre of vines requires no more labor to cultivate it than so much corn.

In relation to the Catalpa. It grows below Vincennes, on the bottoms of the Wabash, and some of the tributary streams, to a very large size. I think I have seen it on the Deshe creek, 7 miles from Vincennes, from two and a half to three feet diameter, if not larger. It grows at this place very rapidly, as it does in the lower parts of Virginia; but whether it will attain the size that it does on the Wabash time must determine. If it does I would prefer it to the locust. There is no doubt of its being equal, if not superior, in durability to that timber. And there are objections to the locust which do not apply to the catalpa. The former does not well bear pruning. Cutting off a limb of even an inch in diameter will lay the foundation of a defect in the heart. My neighbor, Judge Matson, informs me that this is invariably the case, and my own experience coincides with his. This may be obviated by great attention to rubbing off the buds which put out from the stem of the tree several times in the summer. The locust is also subject to be attacked by an insect which sometimes destroys all that are in the vicinity of the place where they make their appearance. In cultivating the locust it is necessary to appropriate a piece of ground solely for that purpose. Raising them in or on the edges of your cultivated fields will give you great trouble, from the distance to which they push their roots and the number of sprouts which they throw out whenever they are touched by the plough or hoe. A single tree standing in a ploughed field will often in one year produce a young grove, in a circle around it, of 100 feet diameter. In this situation, and on the sides of the fields where these trees have been planted, or grow naturally, they give us, in this neighborhood, a great deal of trouble, to keep them from taking entire possession of our arable lands. We have however, a great deal of land, which is too broken for the plough, where this valuable timber is extending itself. I have made great use of it for fencing; but far from diminishing in quantity it has increased ten fold, in the last fifteen years. The insect, which is to fatal to it in other places, has as yet committed no depredations in this vicinity. The catalpa is as easily raised from the seeds as the locust, and is more manageable. Both, however, may be cultivated to advantage. Were I to devote a piece of ground solely to the purpose of rearing a growth of timber, I would prefer the locust. But, for the reasons I have given, I would not plant that tree in or on the border of lands which are intended for the plough. In such situations the catalpa is particularly suited. It will not intrude beyond the limits you assign to it, and as an ornamental tree it is, in my opinion, greatly superior to the locust. But after all I cannot promise you that the catalpa will succeed in your situation. My remarks of course apply only to places where the soil and climate are congenial to its growth. From its being found in its native state only in rich, light, alluvial land, it is highly probable that it will not attain to its proper size and hight on land of different description. To your question as to live fences I answer, that I have never atempted to raise any, my circumstances not permitting me to make expensive experiments. My *son-in-law,* Judge Short, has, however, a honey locust hedge which is now a tolerable fence, and he thinks would have been a very effectual one if he had not been induced, by an English gardener, to put out the plants in a single rather than the double row recommended by Cobbet, and upon which plan he had commenced his experiment. A friend of mine lately informed me that he had seen a black walnut hedge growing in Indiana which promised to be successful. The reason that the attempts to make live fences are not as successful in the United States as in England is from the greater moisture of the climate of the latter compared with ours. To this cause is to be attributed the almost universal failure in this country to form them of the several varieties of the thorn. At least I believe that they have nowhere succeeded when they have been planted on an embankment, or upon the edge of a ditch, as is universally the case in England. If they succeed at

all here it must be by planting them on the level ground, where none of the water that falls near them can be drained off. And as it is necessary to plant them in double rows I fear that our dry summers would not afford sufficient moisture to maintain so large a mass of vegetation when the plants arrive at a state of maturity. This is, no doubt, the cause of the frequent occurrence of gaps in all the old hedges that I have seen. But, however great the difficulty of forming live fences, the advantages they have over the common modes of fencing are so great that the attempts to rear them should still be prosecuted until all of our forest trees have been tried. In the address to which you refer, I recommended another mode of fencing, more effectual, against the intrusion of animals than any hedge, equally durable, and which, if the first cost of construction is greater than the hedge, will not, like the latter, require any annual expense for ages. I allude to the mode of construction called pise; and which in France and Spain is extensively used for the walls of houses, and in South America for fences as well as houses. The mode of making walls of this discription is very simple and is particularly explained in the address to which you referred. It is described in Rees' Encyclopedia, and much better in a small work published some years ago in Brunswick, New Jersey, by a Mr. Johnston. I have lately seen, in one of the newspapers, an essay from the pen of that distinguished agriculturist and patriot, the late Judge Peters, of Pennsylvania, in which he strongly recommends pise for the construction of frame buildings. I am so well satisfied that it is the cheapest and best way of making houses of every description, as well as fences, that if I were beginning my farming operations, and had the means of putting my farm in complete order, I would use the pise alone in their construction. Among the inducements to rear hedges is the superior beauty which they give to the scenery of the country in which they are used for fencing. No one will allow more weight to this circumstance in their favor than I do. But to keep a hedge in a state to be ornamental requires no inconsiderable annual labor. If I admit that a pise fence is not altogether as beautiful an object, when viewed at a short distance, as a well kept hedge, I maintain that it infinitely surpasses the hedge in imparting beauty to a distant scenery. In Columbia these fences are often white washed and the coping or roof formed of red tiles, while at their sides grow the wild rose, and many of the beautiful parasite plants of that country. With these accompaniments a pise fence is a pleasing object when looked at in any way. But a long line of this kind of fence, passing over hills and valleys, from the contrast which its white side creates with its red top and the dark green of the foliage, with which it is surrounded, gives great animation to the scenery. I do not think that a pise wall of sufficient hight to be an effectual fence would cost double the amount of a well constructed post and rail fence. The rails of the latter will require to be renewed once in every fifteen or sixteen years, if indeed they will last as long as that; but a well built pise fence will last a century or two without repair, if the covering is made of tiles, and if even of boards, the latter will require to be renewed only in twenty or twenty-five years. If you have stone upon your place for the foundation, and the proper kind of earth (and there is scarcely a farm in Ohio without it) and you wish to make a permanent fence, have the implements made for its construction, which will cost you two or three dollars if well made, and try the pise as an experiment. When the wall is completed, if the covering is made of two boards, fastened together at the edges, as described in the address above referred to, give them a coating of Spanish brown, or any other paint; then whitewash the sides of the wall (there is no material, of which a wall can be constructed, that receives and retains whitewash, or any other coloring matter where oil is not used, better than pise). When the wall is thus finished plant along its sides the wild rose, or any other shrub you may choose, and in a very short time your fence will be a beautiful object and will present to the mind the idea of subtantial permanent improvement.

With great regard I am, dear sir,
Your humble servant,
W. H. Harrison.

From the Cultivator.

On Improved Farming.

The method of farming that has heretofore been generally adopted in this country, was to cultivate that kind of crop which gave temporarily the most profitable returns, utterly regardless whether, by a succession of exhausting crops, the soil became impoverished or not. Indeed, it was not till of late years even thought necessary to aid its fertility by such a thing as a rotation of crops, or the regular application of manures. The manner was, to crop it as long as a particular kind of grain could be made to grow, in a given field, and when every particle of fertility was at length extracted from the soil, that lot was thrown away as worthless. A new clearing was made, and then the same bad practice was continued. In the south, they complain of the barrenness of their land; that it yields scarcely a tenth of the produce it did when it first came under culture; that they can now raise but a moiety of the quantity of cotton, tobacco, wheat or corn, per acre, they did formerly; that the farming population are in consequence impoverished, and they are now obliged to sell their farms for a trifle; and to improve their circumstances, many are ready to move off to the west, in quest of a more productive soil. But suppose these effect their object—sell their exhausted farms, and go to the most fertile regions of the world—let me ask, how long will it be before these same people must again move from the same cause that made a first removal necessary, viz. that they have once more worn out their lands? No matter how fertile land is, you may, by raising crop after crop upon it, if you do not in some way manure it, make it in time utterly worthless. In that respect it is like your ox,—no matter how vigorous, well-conditioned and fit for labor he may be, if you work him to excess, and give him scanty fare, he becomes at length broken down and valueless. But it is not in the south alone where this species of bad management has prevailed. The north comes in for her share; and, strange as it may appear, for all intelligent farmers now acknowledge the necessity for occasional manuring, and a judicious rotation of crops, this suicidal practice still obtains upon some of what is now the finest land in New-York.

The western part of this state is noted for raising large crops of wheat, and we often hear farmers from that portion of it boast of the wheat crops they have successively taken from particular fields. This for a time may do very well, but according to every principle of correct farming, it is miserable management; and although the occupant now is rich, he will leave a legacy of an exhausted farm to his son or successor. There is no such thing as an inexhaustible soil. It is contrary to every principle of reason and experience. The valley of Egypt, from the time of Moses, has been celebrated for its fertility, but remember even in his time it already required the overflowing waters of the Nile to make it produce its usual crops. If a dry season intervened and the waters, the cause in part of its fertility, did not rise to their usual hight, that season was one of suffering for want of bread. The farming history of western New-York, as to the fertility of the soil, has been the history of every portion of the state, as it was successively cleared of its timber, and put to the purposes of cultivation. What is now called the old settled part of the state was formerly thought the best of land; for a succession of years wheat crops were raised from it until it became exhausted, and wheat could be raised no more. This it took years to accomplish; but no matter how rich the virgin soil, it was ultimately effected, and what was once thought the finest land in the world, was at last, by this miserable management, made almost worthless.

Emigration to our western country owes much to this circumstance, and many of its present possessors must follow the example of our predecessors and former neighbors, and remove, or adopt some other mode of farming, by which the errors of former years can be remedied. We have now found out, that it requires all of the intelligence, judgment and skill that we can command, to bring back in part, our farms to the state of fertility which nature gave them; and to accomplish this, we feel the necessity of the most judicious and systematic management. To begin, we find ourselves deficient in all the requisite information upon which a correct judgment can alone be formed;—we find that we ought to know the nature of the soil we cultivate, what plants grow the most vigorously in it, and what artificial aid we can give to make it the most productive. But are we competent to this? Can we analyze the different soils without a due course of education? Can we know what plants do best upon particular locations without we understand their nature? Can we provide the best and cheapest food for them, until we learn what enters into their combination, what they take up and what they leave behind? The sciences unquestionably throw great light upon these as yet to us hidden laws of nature, and until farmers derive collateral aid from them we can only follow in the footsteps of our fathers. They, however, had advantages which we do not possess; they had a virgin soil to repay them for their agricultural labor. We have the exhausted fields which we are endeavoring to restore to fertility, and at the same time provide bread for our families.

Thus far we have met with some little success, for we see indications that our efforts have not gone entirely unrewarded; that our land begins to yield more bountifully, and that it can be made capable to do much more. It is not long since it was a general observation, that land did not yield over three per cent interest; and if we could not believe the veracity of those who make the assertion, we had at least numbers to endorse it. It was unquestionably true, land at that time was not as productive a source of revenue as money at interest. Could the price of land at that time be otherwise than low, when it did not yield a sufficient return for the investment? No man bought it unless he was by occupation a farmer, or compelled to take it in payment of a debt. But since a better, and of course a more productive system of farming partially obtained, land has risen in price. It is more sought after, and it is becoming more fashionable for gentlemen to cultivate small farms. Formerly grain was almost the only source of revenue derived from a farm, and, as the most of these had become impoverished by bad husbandry, the quantity raised was of course small, and the per centage profit bore no proportion to its first cost. This management was in time found very unprofitable. A different system has been introduced, and the good effects from it are already decisive. To stock your farm, feed up your hay, straw and offal, and thus realize two profits—the first upon the increased value of your stock, the second from the sale of your grain. By this practice you are enabled to make a much larger quantity of manure; and from this, again, not only raise an increased quantity of grain, but enrich your fields, and thus extend the number of your stock. Our best farmers adopt this practice, and the success that has attended it in the county of Duchess is the strongest proof of its correctness.

It may be inquired, however, what kind of stock is the most profitable. That must depend in a great measure upon the adaptation of the soil to raise natural or artificial grasses, and the nearness of the farm to a good market. On some, a dairy may do best; on some the fattening of cattle; on others, the raising of sheep: but the last is attended with the least trouble. The market for the carcase or the wool is almost always at hand, and upon the whole, particularly in the interior, generally the most profitable. A farm costing $30 per acre, and adapted to the raising of grass as well as grain, will support sheep enough to pay the interest on the investment, and all expenses, besides raising about as much grain as if there were no sheep upon it. This is not idle assertion. We have abundant evidence of

the fact, and can cite chapter and verse to substantiate it. It is this practice that makes the Dutchess county land sell for $70 per acre, while other land equally as good, but not so well cultivated, and whose capabilities have not been so well ascertained, will not sell for half the price. A farm cultivated in this way is constantly improving. The hay raised on it is not sold, but it is fed to the sheep, who in return give a large quantity of manure, so that as much grain as was formerly raised upon the whole, is, by this course of tillage, grown upon half or one-third of the ground. Of this method of farming, we have had some experience, and every ton of hay fed out upon a farm to this kind of stock, is worth to the farmer at least $20—how unprofitable then for them, for want of this stock, to sell their hay for $5 per ton, for in this way they meet with a double loss: they do not get the full value of their hay, and the manure it would produce from their not feeding it, is an entire loss. The growing of wool in this country cannot in many years be overdone. There are large quantities annually imported, and must be for some time to come. We have over thirteen millions of inhabitants, and raise but about fifty millions of pounds of wool, which is not four pound to each inhabitant. A much larger quantity than this is required for our present population, and with all our facilities for keeping sheep, the low price of our lands, and a climate that seems to suit their constitution, we ought to make it an article of exportation, and not of importation.

Lyceum Seminaries.

The following communication on this subject addressed to the Editor of *Niles' Weekly Register*, and recently published in that work, has been forwarded to us with a request that we would give it publicity. We are also informed "that measures are adopted to have forwarded to each county town in the Union, such pamphlets, periodicals and papers, as will fully explain the plan, operations and advantages of the Lyceum system, especially of a *Central Lyceum Seminary*, about being established, and furnish other aid for rendering the proposed conventions instructive and successful."

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To the Editor of Niles' Weekly Register.

Self-education and *self support* is, in all the departments and all the operations of the lyceum system, its most prominent feature. It acknowledges the benevolence, the overflowing goodness of our Creator, in furnishing all his rational creatures with the faculties, and in surrounding them with the materials, or means, of growing and rising in physical, intellectual and moral strength. The great object of lyceums is to call into exercise those faculties, and into use those materials, so abundantly furnished by the wisdom and goodness of the Great Creator, and the constant and abounding Benefactor.

There is, however, one department of the general and *national* institution of lyceums in which the principle of self support is more fully and more prominently recognized than in any of the rest. The general plan of lyceums has ever contemplated, within every county or other moderate district, a *manual labor* and *self supporting* school, which should furnish to its pupils advantages equal to those in our colleges for general literature and science, and much superior for a practical business education to those of any institutions in our country. While these schools are designed to afford to farmers, mechanics and all the industrious classes of the community, the best opportunities for a practical, useful education, they are also intended to be, in the strictest and best sense of the word, seminaries for teachers—for teachers of schools and lyceums. They are intended to furnish the means for teachers to support and educate themselves, and at the same time to construct their own apparatus and various instruments of instruction, while they are learning the modes of using them, and acquiring the knowledge they are designed to illustrate. Lyceum seminaries are intended to unite manufactories of apparatus for illustrating various departments of science, and the qualification of teachers to use the instruments for diffusing the science among all classes of the community, and in every section of our country.

Experience, on this subject, has already proved, that young men, and even lads, after a short time, and probably young ladies and misses, can pay, by their own industry, all their expenses of board, clothes, books, tuition, &c. and at the same time acquire a more thorough, useful education, than it is possible for any college or other institution, without manual labor to give them. Such being the testimony of experience, the conclusion follows, that any plain farmer's son, or poor mechanic's daughter, can have the means of acquiring a *better education* than the money of the rich can purchase for their children.

In all the departments, and in all the operations of the lyceum system, there is harmonious action and reciprocal and united effort. So, between the lyceum seminaries in all parts of the country, there is intended to be a virtual, though, perhaps, not a formal connection. In many of their operations, especially in the manufactory of apparatus, they may render each other very important aid; and, by their united efforts, furnish, not only colleges, academies and high schools, but lyceums, common schools and families, with more abundant, cheaper and better instruments of instruction, *tools of knowledge*, than can possibly be furnished from any other source.

The whole plan of lyceum seminaries will embrace, then, a central institution, which shall combine a seminary for teachers and a manufactory of apparatus, for a part, and a prominent part of its manual, productive exercises. This institution will, as far and as fast as its means will permit, furnish facilities to any other manual labor schools, by supplying them with prints, tools, experience, &c. as aids to their intellectual productive exercises. With such aid, any manual labor school, now in operation might engage in the manufactory of globes, mechanical powers, geometrical solids, and most of the instruments for the *practical sciences*, if not for the more abstract and abstruse subjects.

These statements, Mr. Editor, are not from theory or conjecture; they are from experience for a course of years; having conducted an agricultural school for ten years, in which the pupils paid all their expenses by their own industry; and having also had much apparatus made under my direction, and, in a great measure, by the strength and skill of lads and misses from fourteen to eighteen years of age.

The question will naturally arise, by what means can these seminaries, whose prominent feature is self education and self support, be established through our country, in such numbers, and under such circumstances, as to hold out proposals, and afford opportunities, for the children of every class, without distinction, to *secure to themselves* the rich blessings of a sound physical, intellectual and moral education.

To this natural and important question the answer may be, perhaps, by COUNTY LYCEUMS. It is evident that the whole community, and all sections of our country, can more conveniently act, and co-operate with each other, through the medium of county societies, than by any other divisions or districts known throughout the states. As counties through the union will, probably, not average more than forty miles in diameter, very few would have to travel more than twenty miles, and a large majority less than ten miles, to attend county conventions, or the quarterly meetings of county lyceums. Considering the importance, and, if properly conducted, the instructive and interesting character of education conventions, which county lyceums might easily furnish at their quarterly meetings, a general attendance of teachers, school committees, parents, children, and the lovers of knowledge and the friends of education generally, might reasonably be expected. And by their attendance, a warm and generous sympathy, an organized and vigorous system of measures and efforts, might be sustained, for the great and all important cause in which every man, woman and child, is equally interested.

Under such views and feelings, I have witnessed, with no little satisfaction, proposals for *simultaneous action* in this cause. The proposal has been made, and responded to from several sources, for county education conventions, in all the states and all the counties in the union, on the first Wednesday of November next, for the purpose of organizing county lyceums, as a preparatory step for accomplishing any other objects, which might be found practicable. Among the objects which county lyceums might, at an early period, take up to advantage, would be seminaries for self education and self support. In connection with these, and perhaps in many instances preceding them, *circuit schools*, for the purpose of weekly, semi-weekly, or even semi-monthly courses of instruction, where more frequent courses could not be sustained, might be taken under consideration and *carried into effect*, by county societies. Indeed, the advantages of associations for systematic and concentrated effort, in the diffusion of knowledge, are so great and so evident, and the results of county lyceums in particular, have been so uniformly and so strikingly happy, that the proposal for such measures only needs to be made to be seconded, and to secure the general sanction of enlightened individuals and communities.

On the subject of simultaneous action, through the medium of county conventions and county lyceums, it is gratifying to be able to state that numerous facilities may be procured to render the meetings, not only useful, but instructive and entertaining. Thomas S. Grimke, of Charleston, S. C. as a committee, appointed by the literary and philosophical society of that state, has recently prepared an address to the citizens of South Carolina, to be published soon, giving an exposition of the lyceum system in its various departments and operations, from national and state societies, down to *family lyceums*, and from exerci-

ses for mutual and self education in the dead languages and the most abstruse sciences, down to penmanship, reading and orthography. This address, which is as applicable to the citizens of other states as those of S. Carolina, can easily be procured, and portions of the whole of it read, as one of the exercises of the proposed conventions.

Numerous other pamphlets have been published on the subject, some of which contain the forms of constitutions, among other things to facilitate the operations and the objects of the meetings.

All the materials and means for commencing *county museums*, or cabinets of nature and art, are at hand in great abundance. In the numerous cabinets already collected, both by individuals and by institutions, are duplicates which the owners will gladly appropriate to such an object, whenever an opportunity is offered.

In the gold regions at the south are several county lyceums, whose prominent object is to collect and exchange specimens. From this source, a museum in each of the eleven hundred counties in the states, may be supplied immediately with specimens of gold ore.

In every county a museum might be commenced, at the first meeting, by specimens carried by those who should attend it. The specimens thus collected if not known by those who presented them, might be named and described by some other persons present, as in nearly every county, are a few individuals who have some knowledge of natural history.

Among the most encouraging and gratifying circumstances, as an aid in promoting the objects of county lyceums, is a resolution recently passed by the board of managers of the Baltimore Union Lyceum, which is as follows:

Resolved, That this board esteem the organization of county lyceums throughout the union, as an important step for the advancement of American education: that we will prepare, as soon as practicable, specimens of minerals, plants, penmanship, map drawing and needle work, for any county lyceum which may apply for the same, and that we invite the school and other juvenile lyceums connected with our society, to render their assistance in accomplishing the object of the resolution.

As great as this resolution may at first appear, it can be accomplished with great ease by bringing in the aid of the juvenile members of the society, by which several thousand specimens are already collected for that object; and if similar measures should be adopted in all our principal cities, as they have already been in several, a system of exchange in the works of nature, and of art, might be easily and readily instituted, which would give, not only to every county lyceum, but to every village and neighborhood, lyceum and school, and even to every family, an instructive and valuable cabinet of natural history, or a museum of natural and artificial productions and curiosities.

The above statements, facts, views, plans and suggestions, are very respectfully submitted for the consideration of such of the friends of education and general improvement, as may have an opportunity and a disposition to examine them,

by their friend, JOSIAH HOLBROOK.

Sickness is felt, but health not at all.

Melons.

A French periodical gives the following method of hastening the ripening of melons. Spread on the melon and round it a thick couch of from one to two inches of pounded charcoal. Lampadius tried this plan at Friebuler in 1813, and succeeded in making melons ripen in a box of earth in the open air, during the summer of that year, in the mining district of Saxony. The surface of the earth thus covered with charcoal had at noonday a temperature of 37. 50 to 47. 50 of Reaumur, while at the same time the thermometer in the shade was only at from 15 to 20, and in the sun at 25 to 37. 50.

CLARIFYING CIDER, &c.—Mr. Joseph Cooper, of New Jersey published an article in the True American, relative to fining cider, by which it appears that the jelly made from bullock's feet will answer the purpose. It should be warmed and mixed with a little of the cider intended to be refined, then strained, and when cold put into the vessel which contains the rest, and stir it till thoroughly incorporated. In bottling cider, it is recommended to raise the proof by putting about two tea-spoonfuls of French brandy into each bottle.

PRICES CURRENT.

ARTICLES.	PER	ROCHESTER. Sept. 25.	NEW-YORK. Sept. 22.
Ashes—Pot....	100lbs.	$3,40.....	$4,12 a 4,00
—— Pearl..	.....	3,60.....	4,75 a 4,85
Beeswax, yellow	lb.	0,18 a 0,20	21 a 22
Candles, mould	.....	0,10 a 0,11	13. a 14
—— dipped.	.....	0,09 a 0,10	11 a 12
Cloverseed.....	.....	6½.....	7 .a. 7½
Flax, American.	.....	.....	7½..a.00
Flax seed, clean	tierce	9,00a10,00	00,00 a0,00
Flour, Western.	barrel	4,75.....	5,18a 5,37
Grain, Wheat..	bushel	0,00a0,81½	1,03 a1,06
—— Rye....	.....	0,62.....	70.a..72
—— Oats...	.....	0,28.a..30	38.a..00
—— Corn...	.....	0,50.....	72.a..75
—— Barley..	.....	0,50.a..00	67.a..00
Hemp, Americ'n	ton	.....	100 a 120
Hops, 1st sort .	lb.	.....	22.a..24
Plaster Paris...	ton	6,50 a 0,00	2,00 a2,25
Beef, Mess....	barrel	8,00 a10,00	9,50 a 10,00
—— Prime....	.....	6,00 a 8,00	6,25 a 6,50
Pork, Mess....	.....	14,00a15,00	13,50a14,50
—— Prime....	.....	11,00	9,00a10,00
—— in the hog.	100lbs.	4,00.....	....
Tallow.....	.....	6,00 a 7,00	6,75 a 7,00
Hay.....	ton	8,00 a 10,00	9,75a11,20
Apples.....	bushel	50.a.100	.....

Superior Seed Wheat.

THE subscriber has now for sale, (growth of the present year,) a quantity of fine seed Wheat—among which are a few bushels of a choice red wheat, imported last year from Trieste, on the Gulf of Venice, by Col. George Williams, of Flushing, Long Island, who raised the present season a beautiful crop of seed, and has kindly spared a few bushels. The produce on his own farm was thirty-five bushels to the acre—weight 56 lbs. per bushel. It is a very plump, clean grain, and will no doubt succeed well at the south. Farmers generally would do themselves a service by sowing, if only one peck, of this valuable grain, the time for which is at hand—price $3 per bushel—original seed cost $6 per bushel. Also, Rochester White Flint Wheat—$2 50 per bushel. Also, Black Sea Wheat—a fall wheat of excellent quality, raised in Massachusetts—price $2 50 per bushel—product 40 bushels per acre. Also, China Spring Wheat—a very productive summer grain—original seed from China. This wheat has attracted much attention among the agriculturists of New England, where the seed now offered was raised—price $3 per bushel.

On hand a general and complete assortment of Garden Seeds, growth of 1834. White and Red Clover, Lucerne, Orchard Grass, Blue Grass, Herds Grass, Timothy Seed, true Guinea Grass, &c. Wholesale dealers supplied on very advantageous terms, either, by the pound or bushel, or if more convenient neatly put up in papers ready for use. Every article warranted genuine.

GEO. C. THORBURN, 67 Liberty st.

ELECTION NOTICE.

Sheriff's Office, Rochester, August 14, 1834.

A GENERAL Election is to be held in the county of Monroe on the 3d, 4th, and 5th days of November next, at which will be chosen the officers mentioned in the notice from the Secratary of State, of which a copy is annexed.

E. M. PARSONS, Sheriff
of the county of Monroe.

STATE OF NEW-YORK, SECRETARY'S OFEICE, }
Albany, Aug. 1, 1834. }

SIR—I hereby give notice that at the next General Election, which is ts be held on the 3d, 4th and 5th days of November next, a Governor and Lieutenant Governor are to be elected.

Notice is also given that two Senators are to be chosen in the Eighth Senate District, one in place of Trumbull Cary, whose term of service will expire on the last day of December next, and the other in the place of John Birdsall, resigned, whose term of service will expire on the last day of December, 1835.

JOHN A. DIX,
Secretary of State.

To the Sheriff of the county of Monroe.

N. B.—The Inspectors of Election in the several towns in your county will give notice of the election of a Representative to Congress from the Twenty-eighth Congressional District; also for the choice of Members of Assembly, and for filling any vacancies in County offices that may exist.

☞ All public newspapers in this county will publish the above, and send their bills to the Sheriff the county. aug 16.

Axtell's Portable Patent Cast

IRON THRASHING MACHINE & HORSE POWER.

THE above Machine and Power can be seen at the Court-House Yard, or opposite E. & H. Ly on's Woolen Factory, near Kempshall & Bush's Furnace. The Power is entirely cast iron, also the Machine, with the exception of the covering to the Machine and staves in the cylinder which the teeth are set into. There are upwards of 40 of the above Machines in operation in Ontario county and vicinity, and take the preference of any manufactured in that quarter. It is useless to state the good properties of the Machine, as there has been so much deception heretofore practiced by Thrashing Machine makers, but if persons wishing to purchase would call and examine, we think they can be satisfied that it is preferable to any kind yet in use.

They have been thoroughly tested, having been used for upwards of a year.

Application for information to *Kempshall & Bush*, few doors north of Eagle Tavern, State-st. or *Stephen Clark*, at Monroe House, on Buffalo-st.

DE GRAFF & TOWNSEND.

Rochester, N. Y. Aug. 29, 1834.

AXTELL'S *Cast Iron Horse Power and Thrashing Machine*, has been used in thrashing one day by my hands for the purpose of exhibiting it. It was drawn by two horses and two oxen, the oxen drawing singly. It was no more than moderate work for them. The Power and Machine appeared to operate well; full as well, and in some respects better, than any I have seen in operation. I did not examine the straw or wheat after thrashing. At the rate it was used when in operation it would, if that rate had been continued all day, have thrashed 300 bushels, and probably more. I know of no reason to suspect that the wheat was not thrashed clean, or that it was cut or broken—it is not fanned. The persons in my employ thought the Machine and Power altogether superior to any other Machine in use in this quarter. SELLECK BOUGHTON.

Rochester, N. Y. Aug. 29, 1834.

This may certify that I have used AXTELL'S *Patent Cast Iron Thrashing Machine and Horse Power*, and can say it will thrash faster and with more ease for the horses than any other machine I have seen. I thrashed, when I first operated it, sixty bushels wheat in one hour and a half, without urging the horses any faster than I should naturally drive during the day. The Machine does not break the wheat, and thrashes clean, and I had no difficulty of any part of Power or Machine breaking.

I have seen quite a number of different kinds of Thrashing Machines operated, and I give the above Machine and Power the preference over any I have yet seen. BARNARD M. HOWARD.

Brockport, Aug. 22, 1834.

We are well acquainted with Mr. HOWARD, and know him to be a farmer of the first respectability, and believe what he states above to be correct.

ROBY, GOOLD & Co.

Brockport, Aug. 22, 1834. sept 3-rf4t

The Rainbow.

BY FELICIA HEMANS.

"I do set my bow in the cloud, and it shall be a token of a covenant between me and the earth."—Gen. ix. 13.

Soft falls the mild reviving shower,
From summer's changeful skies;
And rain drops bend each trembling flow'r,
They tinge with richer dyes.

Soon shall their genial influence call
A thousand buds to day,
Which, wanting but that balmy fall,
In hidden beauty lay.

E'en now full many a blossom's bell
With fragrance fills the shade;
And verdure clothes each grassy dell,
In brighter tints arrayed.

But mark that arch of varied hue
From heaven to earth is bowed!
Haste! ere it vanish, haste to view
The rainbow in the cloud!

How bright its glory! there behold
The emerald's verdant rays;
The topaz blends its hue of gold
With the deep ruby's blaze.

Yet not alone to charm thy sight
Was given the vision fair;
Gaze on that arch of colored light,
And read God's mercy there.

It tells us that the mighty deep,
Erst by the Eternal chain'd,
No more o'er earth's domain shall sweep,
Awful and unrestrain'd.

It tells that seasons, heat and cold,
Fix'd by his sovereign will,
Shall, in their course, bid man behold
Seed time and harvest still.

That still the flower shall deck the field,
When vernal zephyrs blow:
That still the vine its fruit shall yield,
When autumn sunbeams glow.

Then, child of that fair earth, which yet
Smiles with each charm endow'd,
Bless thou his name, whose mercy set
The rainbow in the cloud.

Great Cave.

The following description is given of a cavern on the side of Mount Parne, which was visited by Mr. Hobhouse and a noble friend in an excursion from Karatea to Cape Colonni.

"We ascended for some time, and, turning around the eastern extremity, came to the south side of the range. The clouds hanging on the side of the hills retarded our progress; but, after scrambling up some way in the mist, we again found ourselves in the light. The sun shone above head in a clear blue sky; and whilst the country below seemed like an expanse of white water, the ground where we stood, and the summits of other mountains, had the appearance of invulnerable islands rising abruptly from the sea. Arriving with much difficulty at the top of the range of hills, we came, after a long search, to the mouth of the cavern. A fragment of impending rock almost concealed the entrance. We leaped down on the first landing place, and there struck a light; and having each of us taken a pine torch in our hands, together with a supply of strips of the same wood, let ourselves down through a very narrow aperture, where there was a choice of two entrances, one to the right, the other to the left. Creeping down still farther, we came at once into what appeared a large subterranean hall, arched over head with domes of crystal, and divided into long aisles by columns of glittering spars—in some parts spread into wide horizontal chambers, in others terminated by the dark mouth of steep recesses, descending, as it seemed, into the bowels of the mountain. The vast magnificence of nature was joined by the pleasing regularity of art. We wandered from one grotto to another, until we came to a fountain of pure water, supplied partly by a stream that trickled down the petrefactions depending from the roof, and partly by a spring bubbling up from the rock below. By the side of this basin we loitered some time, when, as our torches were fastly wasting, we resolved to return; but after exploring the labyrinth for a few minutes, we found ourselves again at the fountain's side and began, not without reason, to be somewhat alarmed; for the guide here confessed, that he had forgotten the intricacies of the caverns, and knew not how we should ever recover our path. We were in this situation, and now and then climbing up narrow apertures, totally ignorant of our position, for many minutes, and the last strip of fire was consumed, when we saw a ray gleaming towards us, and, directing our steps that way, arrived at the mouth of the cave. Had our light been extinguished, there would have been but little, if any, chance of our escape. The splendor and beauty of the scene would have vanished with the last blaze of our torch, and the fairy palace been at once converted into a dark and inextricable cavern, a dungeon and a tomb. The mind cannot easily picture to itself any "slow sudden" death more terrible, than that of him who should be buried in these subterranean solitudes, and after a succession of faint hopes and eager efforts, sink at last subdued by weakness and despair."

Velocity of the Wind.—The velocity of the wind varies from nothing up to 100 miles an hour but the maximum is variously stated by different authors. According to Smeaton, a gentle breeze moves between four and five miles an hour, and has a force of about two ounces on a foot; a brisk pleasant gale, moves from 10 to 15 miles, with a force of twelve ounces; a high wind, thirty to thirty-five miles, with a force of five or six pounds; a hurricane, bearing along trees, houses, &c, has a velocity of 100 miles, and a force of forty-nine pounds on the square foot.

French Politeness.—The following compliment was lately paid by a Parisian dentist to a lady.—He had made several ineffectual attempts to draw out her decayed tooth, and finding at last that he must give it up, he apologized by saying—"The fact is, madam, it is impossible for any thing bad to come out of your mouth."

A SHORT SERMON.

The following pithy Sermon, from a *pithy text*, has been published in England, and has met with a very extensive circulation in that country:

"*Be sober, grave, temperate.*"—Titus ii. 2.

1. There are three companions with whom you should always keep on good terms.

1st. Your Wife.
2d. Your Stomach.
3d. Your Conscience.

II. If you wish to enjoy peace, long life, and happiness, preserve them by Temperance: Intemperance, produces,

1st. Domestic Misery.
2d. Premature Death.
3d. Infidelity.

To make these three points clear, I refer you,

1st. To the Newgate Calendar, the Old Bailey Chronicle, and the Police Reports.

2d. To the hospitals, lunatic asylums, and work houses; and

3d. To the past experience of what you may have seen, read, and suffered, in mind, body and estate.

READER DECIDE!

Which will you choose—Temperance, with happiness and long life, or Intemperance with misery and premature death?

Memory.—How a single word—a single tone—a single look—will sometimes gives the key to a mystery. There are moments when conception, awakened we know not how, flashes like lightning through all space, illuming at once a world that was before all darkness. One single tone will sometimes touch the electric chain of memory and run, brightening, over a thousand links in the past, which connect that to thoughts of days long gone by.

The Weather.—A late writer, in speaking of the weather, calls it an "unfortunate scapegoat, upon which is not only thrown the disagreeable burden of opening every conversation commenced between two strangers, but upon whose shoulders every ignoramus feels privileged to throw the entire weight of his own indigestible stupidity."

There is a most admirable lesson contained in the following extract from Miss Hannah Moore's Strictures on the modern system of female education:

"Since then there is a season when the youthful must cease to be young, and the beautiful to excite admiraton, to learn *how to grow old gracefully*, is perhaps one of the rarest and most valuable arts that can be taught to woman. And it must be confessed, it is a most severe trial for those women to lay down beauty, who have nothing else to lay up.

"It is for this sober season of life that education should lay up its rich resources. However disregarded they may have been, they will be wanted now. When admirers fall away and flatterers become mute, the mind will be driven back again upon the world with increased force. Yet forgetting this, do we seem to educate our daughters for the transient period of youth, when it is to mature life we ought to advert? Do we not educate them for a crowd, forgetting that they are to live at home?—for a crowd and not for themselves?—for show and not for use?—for time and not for eternity?"

Take care how you go up the ladder.—Matthew Carey, speaking of his marriage, says: "My wife was about ten years younger than me. She was industrious, prudent, and economical. She had a large fund of good sense. We early formed a determination to indulge in no unnecessary expense, and to mount the ladder so slowly as to run no risk of descent. During the whole course of our marriage, I never, as far as I recollect, entered a tavern, except on a jury, or arbitraton, or to see a customer, or at a public dinner—never, in a single instance, for the purpose of *drinking*."

How very different the conduct of some young married people, ay, and old married ones too, now-a-days. They can go to the tavern and the grog-shop, eat oysters, drink grog, play cards, dice or nine-pins, spending their seventy-five cents or a dollar, two or three times a week. No marvel such people never go up the ladder. They are always at the bottom, and there they will stay as long as they live. A jug of rum tied to a man's neck is a hard thing to carry up the ladder, and many a man, after he has dragged it half way up, has been suddenly tumbled down to the bottom.

The New American Orchardist,

OR an account of the most valuable varieties of Fruit, adapted to cultivation in the climate of the United States, from the latitude of 25 deg. to 54 deg., with their uses, modes of culture and management; remedies for the maladies to which they are subject, from noxious insects, and other causes, &c. Also, a brief description of the most ornamental forest trees, shrubs, flowers, &c., by William Kenrick. Price $1. For sale by

sept 19 HOYT & PORTER.